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JOHN AUERBACH COMMISSIONER

The Commonwealth of Massachusetts Executive Office of Health and Human Services Department of Public Health

William A. Hinton State Laboratory Institute 305 South Street, Jamaica Plain, MA 02130

01/26/2012

John Wortmann Assistant US Attorney, Boston District

Dear AUSA Wortmann,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Curriculum Vitae for Annie Dookhan & Lisa Glazer.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #

#

- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

I, Annie Dookhan, was the custodial chemist and performed the preliminary testing and net weight for this sample. Lisa Glazer analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Annie Dookhan

Chemist

Sincerely

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry

University of Massachusetts, Boston, Ma, Bachelor of Science

Major: Biochemistry Minor: Economics

Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- *Writing of the Standard Operating Procedures (SOPs) and Protocols.
- *Responsible for the Quality Control and Quality Assurance of analytical instruments, reagents and controls/standards.
- *Maintenance and repairs of analytical instruments.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Qualified as an expert witness in Massachusetts Courts and U.S. District Court.
- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health.
- *Notary Public.

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MBL Quality Control and Quality Assurance Department for the Food and Drug Administration.
- *Method Development for creating new techniques for the QC Dept. and FDA.
- *Writing, revising and reviewing the Standard Operating Procedures (SOPs).
- *Trained and supervised new chemists and interns for the department.
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Courses:

Department of Justice - Forensics Professionals

Introduction to Forensic Drug Chemistry

Chemical Spot Test and Mechanism for Illicit Drugs

Forensic Mass Spectrometry

Forensic Science 101: An Introduction

Fundamentals of Forensic Questioned Documents

Perspectives in Expert Testimony

Evidence Analysis

Ethics in Forensic Science

Transition to Leadership

Fundamentals of Forensic Toxicology

Additional Trainings:

Good Laboratory Practice/Good Manufacturing Practice (GLP/GMP) training with Massachusetts Biologic Laboratory.

Quality Control/Quality Assurance (QC/QA) training according to FDA Codes and Regulations.

Gas Chromatography (GC) and Gas Chromatography/Mass Spectrometry (GC/MS) trainings with Agilent Technologies and Restek.

High Power Liquid Chromatography (HPLC)and HPLC/MS/MS trainings with Waters Cooperation.

Fourier Transform Infrared Spectroscopy (FTIR) training with Spectros and Spectum One.

Ultraviolet-Visible Spectroscopy (UV-Vis) training with Agilent Technologies and Beckman.

Total Organic Carbon Analyzer (TOC) training with MBL and Sievers.

Associations:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Lisa A. Glazer

Education

Bachelor of Science Degree, CHEMISTRY January 2006

UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

Bachelor of Science Degree, FORENSIC SCIENCE January 2006

UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus, Biology, Criminal Justice and Forensic Science courses

Employment

Chemist I, II State Laboratory Institute

(May 2007-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2007.

Laboratory Technician I (August 2006 - May 2007)

University of Connecticut Chemistry Department - Storrs, CT

- > Prepared unknowns, chemical reagents and supplies for undergraduate chemistry courses
- Set-up experiment demonstrations
- Properly disposed of hazardous waste from the experiments
- Made sure labs were being conducted safely
- Kept track of student laboratory paperwork, inventoried glassware and chemicals and helped clean glassware

Intern (September 2005 - November 2005)

CONNECTICUT STATE POLICE FORENSIC LABORATORY - Meriden, CT

- > Worked on a Pyrolysis Gas Chromatography project
- Observed in the GSR testing, Forensic Biology, DNA, Questioned Documents, Black and White Photo, Latent Prints, Firearms, Trace Evidence and Color Photo Units

Trainings

Multijurisdictional Counterdrug Task Force Training (May 20, 2008)

Current Drug Trends - Methuen, MA

Multijurisdictional Counterdrug Task Force Training (May 6, 2009 - May 7, 2009) Courtroom Testimony – Methuen, MA

DEA Forensic Chemist Seminar (June 21, 2010 - June 25, 2010) Sterling, VA

DRUG RECEIPT	BOOK #66_ PAGE #192_ DESTRUCTION #			
Name & Rank of Arresting Officer Sqt. Det.	Keenan	ID#_ 1065Z		
DEFENDANT'S NAME	ADDRESS	CITY	STATE	
		Boston	MA	
DESCRIPTION OF ITEMS SUBMITTED	GROSS QUANTITY	GROSS WEIGHT	E ONLY ANALYSIS NUMBER	
Shite Rock Carack coca;	ne) 2 p/6's	5.34		
-		-		
To be completed by ECU personnel only Name and Rank of Submitting Officer		1D#	2	

ECU Control # _____

Date Analyzed:

City: Boston D.C.U. Police Dept.

Officer: P.O. Diana Lopez

Def:

Amount:

Cont: pb

Date Rec'd: 01/26/2011

Gross Wt.:

No. Cont:

5.34

No. Analyzed: \

Net Weight: 0.19

Subst: SUB

Tests: 6-050

Prelim: Cocaine @

Findings: (

DRUG POWDER ANALYSIS FORM

SAMPLE # AGENCY AGENCY	Bosten . ANALYST ADD
PHYSICAL DESCRIPTION:	Gross Wt (4): 0.3 435
our write enrugates	Gross Wt (1): 0.1791
~ 1 m e =	Pkg. Wt:
similar	Net Wt: 0.140
PRELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt Thiocyanate (—) —	Gold Chloride
Marquis	TLTA (-) +
Froehde's	OTHER TESTS
Mecke's	
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS cocano	RESULTS Cocaire
DATE 03-30-11	MS OPERATOR LAG
	DATE 4-6-11

Revised 7/2005

File Name : F:\Q2-2011\SYSTEM 6\04_05_11\780505.D

Operator : LAG

Date Acquired : 5 Apr 2011 8:56

Sample Name : BLANK

Submitted by

Vial Number : 1 AcquisitionMeth: DRUGS.M Integrator : RTE

Abundance TIC: 780505.D\data.ms

5000

4000

3000

Time--> 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50

Ret. Time

2000

1000

Area

Area %

Ratio %

NO INTEGRATED PEAKS

1/20/12

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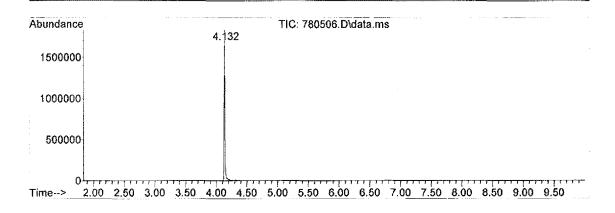
Operator : LAG

Date Acquired : 5 Apr 2011 9:08

Sample Name : COCAINE STD

Submitted by

Vial Number : 6 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.132	1758547		100.00

File Name : F:\Q2-2011\SYSTEM 6\04_05_11\780506.D

Operator : LAG

Date Acquired 5 Apr 2011 9:08

Sample Name : COCAINE STD

Submitted by

Vial Number 6

AcquisitionMeth: DRUGS.M

Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST08.L Minimum Quality: 80

C:\Database\PMW_TOX2.L

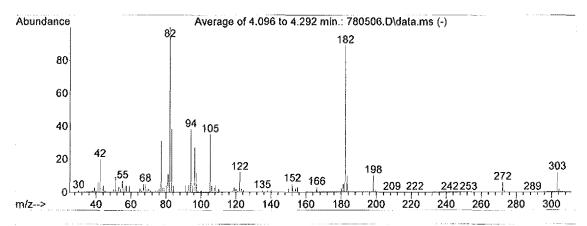
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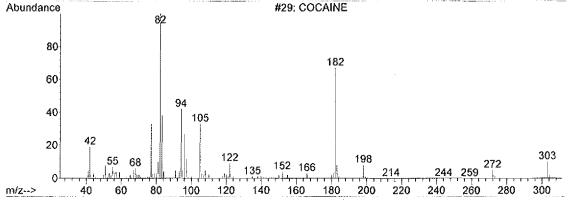
1 4.13 C:\Database\SLI.L

COCAINE

000050-36-2

99







Area Percent / Library Search Report

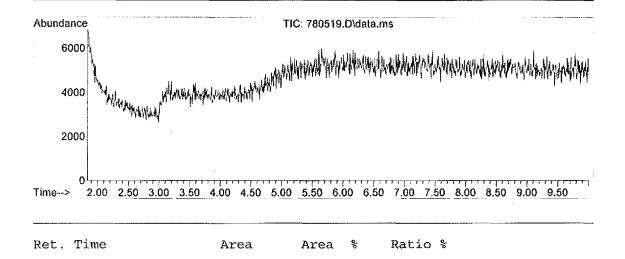
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File Name : F:\Q2-2011\SYSTEM 6\04_05_11\780519.D

Operator : LAG

Date Acquired : 5 Apr 2011 11:56

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



NO INTEGRATED PEAKS

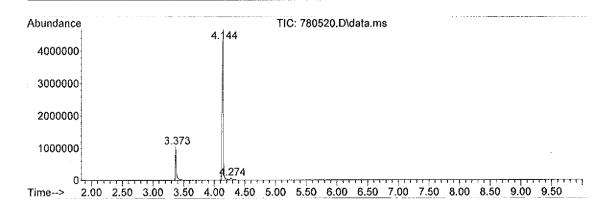
File Name : F:\Q2-2011\SYSTEM 6\04_05_11\780520.D

Operator : LAG

Date Acquired : 5 Apr 2011 12:09

Sample Name : ASD : ASD

Submitted by : ASD
Vial Number : 20
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.373	1323559	16.42	20.11	
4.144	6580825	81.66	100.00	
4.274	154285	1.91	2.34	

File Name : F:\Q2-2011\SYSTEM 6\04 05 11\780520.D

Operator : LAG

Date Acquired 5 Apr 2011 12:09

Sample Name Submitted by Vial Number

: ASD 20 AcquisitionMeth: DRUGS.M : RTE

Search Libraries:

Integrator

C:\Database\SLI.L

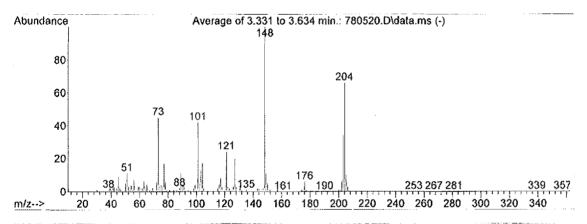
Minimum Quality: 80

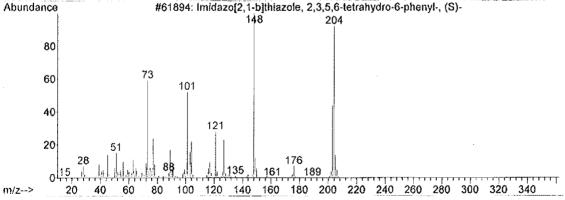
C:\Database\NIST08.L

Minimum Quality: 80

C:\Database\PMW TOX2.L

PK#	RT	Library/ID		CAS#	Qual
1	3.37	C:\Database\NIST08.L			
		Imidazo[2,1-b]thiazole,	2,3,5,6-tet		99
		Levamisole		006649-23-6	99
		Levamisole		006649-23-6	9.8





File Name : F:\Q2-2011\SYSTEM 6\04_05_11\780520.D

Operator : LAG

Date Acquired : 5 Apr 2011 12:09

Sample Name : Submitted by : ASD Vial Number : 20

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

LI.L Minimum Quality: 80 IST08.L Minimum Quality: 80

C:\Database\NIST08.L

C:\Database\PMW_TOX2.L

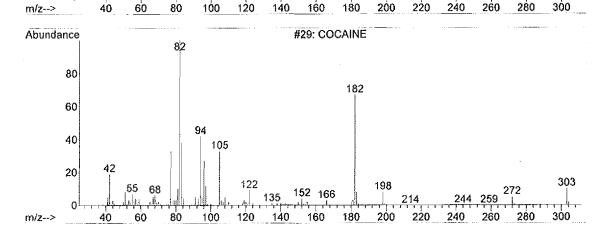
PK# RT Library/ID CAS# Qual

2 4.14 C:\Database\SLI.L

COCAINE

000050-36-2 99

Average of 4.090 to 4.250 min.: 780520.D\data.ms (-) Abundance 82 80 60 40 105 303 20 198 122 152 166 68 138 120 140 200 220 240 260 280





File Name : F:\Q2-2011\SYSTEM 6\04 05 11\780520.D

Operator : LAG

Date Acquired 5 Apr 2011 12:09

Sample Name

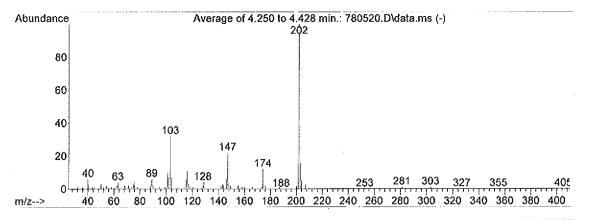
Submitted by : ASD Vial Number 20 ; AcquisitionMeth: DRUGS.M Integrator RTE

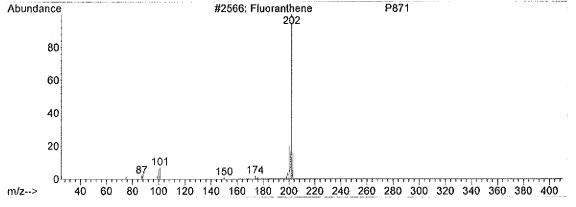
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST08.L Minimum Quality: 80

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
3	4.27	C:\Database\PMW_TOX2.L Fluoranthene	000206-44-0	40
		Pyrene Ethoxyquin	000129-00-0 000091-53-2	38





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Operator : LAG

Date Acquired : 5 Apr 2011 14:18

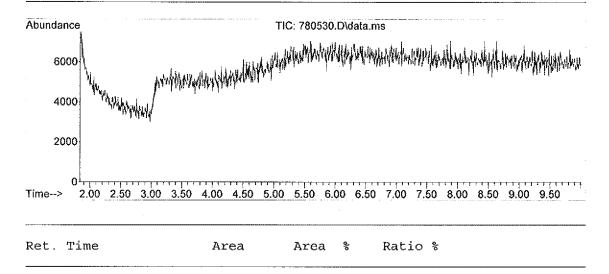
Sample Name : BLANK

Submitted by

Vial Number :

AcquisitionMeth: DRUGS.M

Integrator : RTE



NO INTEGRATED PEAKS

1/3/1

File Name : F:\Q2-2011\SYSTEM 6\04_05_11\780531.D

Operator : LAG

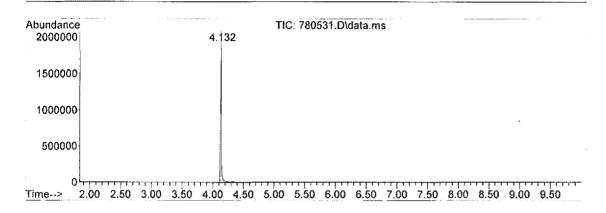
Date Acquired : 5 Apr 2011 14:30

Sample Name : COCAINE STD

Submitted by

Vial Number : 6

AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.132	2010196	100.00	100.00



File Name : F:\Q2-2011\SYSTEM 6\04 05 11\780531.D

Operator : LAG

Date Acquired 5 Apr 2011 14:30

Sample Name COCAINE STD

Submitted by

Vial Number 6

AcquisitionMeth: DRUGS.M

Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST08.L Minimum Quality: 80

C:\Database\PMW TOX2.L

PK# RTLibrary/ID CAS# Qual

C:\Database\SLI.L 1 4.13

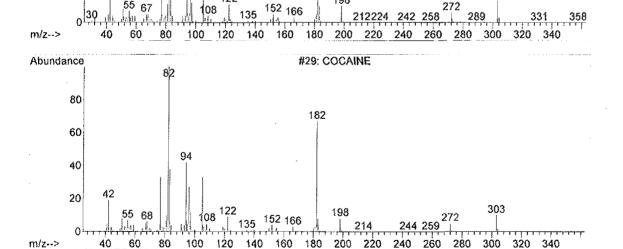
COCAINE

122

000050-36-2 99

303

Average of 4.078 to 4.286 min.: 780531.D\data.ms (-) Abundance 182 80 60 40 94 20



160 180 200 220 240



m/z-->

40 60

100

120

140

300 320 340

260 280